



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE TUTORED FARMER

By Professor W. O. HEDRICK

MICHIGAN AGRICULTURAL COLLEGE

THE much preached but little practised educational precept that "learning should be by doing" was never more boldly applied than in the contemporary endeavor to give technical instruction to farmers and farmers' wives upon their own premises. Farm demonstrations, or agricultural extension work as this movement is known, indifferently, acknowledges the truth that farmers are visualists rather than auralists in their methods of learning. The motor car, telephone and cheap railroad rates have of course had their share in making this new instructional scheme practicable, but after all the preference of the farmer for "being shown" rather than "told" is the basis for the new system.

Farm demonstrations as a systematic way of teaching farmers seem to have been first employed by the late Seaman A. Knapp two decades ago in undertaking to show southern farmers how to escape the evils of the boll weevil in their cotton fields. The technique of the demonstration as employed then by Dr. Knapp and as now used by thousands of county agents and extension specialists is the same and consists in doing upon the farmer's farm or in his house the thing which it is desired to teach. Feats of this sort may be applied to any one of the numerous details which make up the farmer's craft, but their purpose is always instructional and their methods are invariably those of performance.

"Putting on a demonstration," as the act of teaching in this way is called, requires the accomplishment by the demonstrator under the actual conditions of the farm process—the thing—tile laying, tree pruning, crop harvesting or what not—which he wishes to make clear, and preferably to a group of farmers since this extends his message. More than 500,000 visits of this sort were made to farms in 1915 by demonstrators, the last year in which records have been tabulated by the Federal Department of Agriculture.

The farm demonstration method of instructing farmers has proved revolutionary in the realm of agricultural education. Formerly the most successful agencies in this sphere were the

farmers' institutes, technical bulletins, the agricultural press and agricultural educational institutions. The last three of these still remain, but the institute, for a quarter of a century the supreme method of reaching the adult farmer, has surrendered everywhere its supremacy to the newer method of instruction.

Not only has public authority specialized itself to reaching the farmer by this method of instruction, but railroads, banks and certain manufacturing establishments of prominence throughout agricultural regions employ officials who are devoting themselves to this propaganda. The International Harvester Company, as an instance, "puts on" many scores of demonstrations annually in furtherance of its belief in this method of teaching. The method has been successful, too, in accomplishing its purpose. As is well known, the farmer is the most conservative of men. He still hugs himself with the delusion of personal independence. Dean Bailey, of Cornell, tells the apposite story that on leaving for home after conducting a very successful farmer's institute in western New York he overheard the following conversation between two members of his audience as he passed them outside the doorway. "Well, Sam, how did you like it?" "Oh, I don't know," replied the other, "It hain't hurt me none." In spite of this robust self-independence which grows from the farmer's natural isolation in both a business and a social way, he has taken to this new form of instruction. He attends the demonstrations, as is shown by the statistical report from the department of agriculture quoted above, that in 1915 more than 2,959,700 came to these gatherings. The farmer's approval is shown also by the fact gathered from the same authority that he contributed directly during the year, through his county appropriations, a round million of dollars in support of these demonstrations. Many individual county demonstrators, too, in token of their worth to the contributing farmers, receive vastly larger salaries than colleges or universities can afford to pay.

Furthermore, the farmer is anxious to be taught. Not so long ago but that it is a matter of easy memory, farmers spurned anything savoring of "book farming" as applied to their business. Until 1900 our agricultural colleges were puny affairs. Attendance was not from those who intended to follow agriculture, and as late as 1908 Mr. Prichett, of the Carnegie Foundation, in his annual report, declares concerning these institutions—"they have not yet found themselves." Science applied to agriculture has overturned this situation and

the new vocabulary of farming is replete with terms such as these: "bacilli culture," "butter fat tests," "balanced rations," "orchard spraying," "soil liming," "labor incomes," "major performance standardizations" of various sorts, "moisture content," credit associations, etc. Even the most self-confident farmer must admit that he knows nothing about these, and his necessities have rendered him a docile pupil. In addition to this the enormous costliness of contemporary agriculture has forced the farmer to utilize every device to lower expenses. Farms are no longer given away under homestead laws. Quite the contrary—it can easily be demonstrated that farm lands have risen more in price during the eighteen years of this century than during all our previous history. The operator of a costly farm may not wisely omit any helpful teaching which will enable him to make a profit on so much investment.

A demonstration may consist of an object lesson in tiling a field, in kitchen drains and sinks, in the "cold pack" method of fruit and vegetable canning, in how to plant a garden, or in any one or the other hundred additional features of the farm and farm household processes. Usually there is an immediately useful product which results from the lesson—as cans of produce where canning demonstrations have been "put on"—and these go far to create enthusiasm for the belief that education and actual life may be brought close together.

Education "carried to the people" as this is, must necessarily be expensive since, like the "circuit rider" of old, the mentor of this new learning is constantly in the field moving from place to place. Unlike the history of most educational innovations—a history of private sacrifice and initiative until success is achieved, whence adoption is immediate on the part of public authority—the farm demonstration movement received governmental support from the start. An appropriation made by Congress in 1903 for combating the boll weevil in Texas was handed over in part to Dr. Knapp for his demonstrations experiment. Annual appropriations followed from Congress for carrying on what was known as the "Farmers' Cooperative Demonstration Work" in the South and in 1912 appropriations were made for carrying on the same work in the North and West. The Smith-Lever Act of 1914 is the crowning work of government in this great undertaking, and since it not only furnishes the funds, but also the plan of administration for the enterprise some discussion of its terms are necessary.

A sum approximating a half million of dollars was to be

distributed among the states during the first year of this appropriation, augmented by half million increases during each of the eight years thereafter. This is a summary of the finances of the great law. Furthermore, since an amount corresponding to the gift to it from the federal government must be raised by each state, one easily sees that eight millions in toto will be available for carrying on the work in 1922-23 and during each subsequent year.

So large an amount as this devoted to a single purpose must needs have unusual administrative machinery and it is insisted by the law that a separate division or school known as the extension school shall be created in each agricultural college through which these funds are handled. A special bureau in the federal department of agriculture to administer its end—the States Relation Service—and the directive apparatus of the new law is complete. The trend which this new extension effort should take is shown by the further provision that “extension work shall consist of the imparting of information through field demonstrations, publications and otherwise.”

The county agent, as he is called, is the central figure in this mechanism. He is the immediate representative of the Smith-Lever fund and farm demonstration system to the rural locality; he is the chamber of commerce secretary in the open country; the “heading up” agency for all the organized agricultural activities of the county. In 1916 there were 1,225 farm agents employed in the various counties, and 430 women employed in farm household demonstrations, leaving only 1,695 agricultural counties still unprovided with these representatives.

The county agent, whether man or woman, is first and primarily the farmer’s adviser and preceptor. He is the interpreter of the agricultural college teachings and the experiment station discoveries to the farmer. The homely title “farm doctor” was originally thought to be the term which properly characterized him in his attitude toward professional activities. It is usually thought best that he must be a graduate from an agricultural college, but whether educated in science or not, he must certainly be a practical farmer in order to satisfactorily advise. He must have many of the gifts of leadership too, as the further discussion of his work will show.

As an adviser there are no problems pertaining to agriculture which the county agent may not be called upon to solve. A short summary of the typical agent’s services shows him engaged in the judging of live stock and seeds, in the encourage-

ment of under drainage, in illustrating the cultivation, pruning and spraying of fruit orchards. Everywhere he advises with regard to tillage, time of crop planting, varieties, nature of cultivation and harvesting methods. He is also the counselor as to when to market, what rotations to pursue, how to secure credit, and the proper use of machinery. The epithet "general practitioner" well describes this cyclopedia afield and the motor runabout and the telephone are his indispensable allies.

But the county agent is more than an adviser, he is also a teacher and, like the practical laboratory man that he is, he believes that pupils learn best when they conduct their own experiments. Through demonstrations, therefore, upon their own premises, he undertakes to see that each farmer benefits from a practical experience. At this point arises what is probably the most cardinal of the pedagogical precepts which have come up in this new species of teaching and this is that the farmer reacts to no other educational stimuli so quickly as through being shown the successful achievements of some neighbor farmer. "Pick up in one place the instance of a successful farm achievement by one farmer and carry it to the farmers in other places," says an experienced demonstrator, "and you will win their confidence and adherence at once." The county agent undertakes to effectivize this "teaching from example."

"To put on a demonstration," therefore, is the county agent's way of making his teaching agriculturally read by as many as possible. Demonstrations themselves are helped by contact teaching of every sort, such, for example, as automobile and train trips to places where good farm enterprises are to be seen. Most customarily perhaps they are "put on" by being arranged for in advance through getting some farmer to make himself a model in performing some farm feat. It may be the growing of alfalfa, or the using of a fertilizer, or the raising of a special variety of animal or grain. At any rate, at the proper time interested neighbors are motored in and the lesson to be taught is presented.

In this work the county agent is frequently helped by the subject-matter specialist furnished through the state college or the federal Department of Agriculture. Since these subject-matter specialists are the "first helps" to county agents, and indeed are sometimes considered to have their whole usefulness through the teaching field that the agents' need furnishes them, a word of description of these specialists is necessary.

Agricultural colleges and departments of agriculture every-

where have upon their staffs these "teachers on mission" as they may be called, representing one or the other of the various college departmental divisions. They are usually of professorial rank in the college and indeed differ from the usual departmental member only in the respect that their work is afield rather than in the class room or laboratory. It is for them to be ready for the summons from the permanent agent in the field to hasten thence with the desired special message. This done, the subject-matter specialist returns to headquarters to await another call.

However, neither of these two forces—the one on mission nor the one permanently in the field—relies solely upon "occasions" to shape their activities. At stated intervals members of both forces assemble together to shape permanent programs or "projects" of work, as they are called, to be carried thenceforth into practical effect. These programs include a wide variety of farm interest and are entered into with the deliberateness and formality of a general staff preparing a campaign. The specialists are indispensable, therefore, to the county man to keep him freshened in information and also to enable him to systematize his attacks on the farm problems which are to be solved.

In the second place, the county agent is the organization promoter of his county. A slight calculation will show that it is a physical impossibility for any teacher to maintain or even to acquire a personal touch with every farmer in a county. Therefore it is indispensable to the county agent that he perfect some other means of transmitting the message than himself, and the organization of his followers is the device. Sometimes it is only a matter of the federation of existing organizations, since in many country communities farmers have already found their way into concerted action and a redundancy of organization is as bad as too much of anything else.

Farmers indeed are becoming conscious of the merits of united action. The Roosevelt Country Life Commission of 1907 suggested "organization" as a cardinal method of improving country life. The organizations suggested have certainly been forthcoming in recent years both of the sort which express the farmer's passionate and immediate desires, such as the milk producer's unions near our large cities, or the non-partisan league of the Dakotas, but also organizations more firmly rooted in the farmer's needs, such as the granges, farmers' clubs, and the cooperative association of various sorts. Agricultural societies—trade associations they would be called

in town—have existed for generations among farmers. Indeed, it is probable that there is no branch of agriculture, however, small or remote but what it is organized more or less closely for educational and promotive purposes. But the present-day attempts to organize farmers by communities in respect to all their interests, and especially to develop in them class consciousness such as that possessed by unionized labor, promise to become the dominant form of organization in the open country in the near future.

The farm bureau, as the variety of organization is called which the county agent promotes, has its members, whether individuals or associations, acting as teachers or sponsors placed in all parts of the county, and at the center a "clearing house" for ideas and teachings is formed available to every one. It is, in brief, the chamber of commerce idea carried into the rural neighborhoods. The bug-a-boo "class development in a republic" which this program arouses resounds feebly against the movement, since the agricultural class already exists and the sole question is should it be organized into efficiency or remain disorganized and impotent. Usually the headquarters of the farm bureau is in the county agent's office in the local courthouse, and here its members meet at intervals to discuss projects or decide upon undertakings in the betterment of the county farming.

The demonstration movement does not expend itself solely upon the farm and farm household, but reaches out in a well-organized way through boys' and girls' clubs to the youth of the farm regions. In both forms of this junior extension work, as this activity is called, the clubs derive their funds and take on a similar administrative system to that of the county agents just described. The end in view is inspirational rather than the immediately practical. Boys' and girls' clubs are auxiliaries to the agricultural schools and endeavor to furnish stimuli of the agricultural sort which will keep young people interested in farming. Nevertheless, in the frenzied farming which took place last spring resulting from the food famine fear, these associations of children became immediately practical, since they took over a large proportion of the school gardens which were then so important. Indeed, the fifteen per cent. increase in agricultural production in 1917 over any preceding five-year average in our history may be attributed in no small degree to the efforts of the extension specialists, both of the junior and senior sort. Congress made large especial appropriations—as did certain state legislatures also—to both

these classes of workers during each of the two years since our entrance into the war, and few expenditures seem to have been better warranted or to have given better satisfaction than these.

An educational institution, of such vast proportions and unique scope as that provided by the Smith-Lever Law, has seldom been established upon so small a basis of experience. Much experimentation is therefore inevitable. Already serious problems have arisen as to the proportions of authority between the federal Department of Agriculture and that of the different states. Furthermore, the activities of the teaching staff are too largely shaped by circumstances rather than in accordance with a fixed program. Suitable instructors have been difficult to obtain, not only on account of the inherent difficulties of the new scheme of instruction but also because of the man absorption of the war. Extension teaching in general, however, has proven its merits and has become a permanent part of our educational system, and there seems to be little doubt but that the special form of this new style of teaching which makes use of the demonstration method will find its place and maintain itself in its proper field.